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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/722,474      | 11/28/2003  | Anthony Joch         | 178827-336070       | 7988             |

7590 05/10/2007  
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| EXAMINER |
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RAO, ANAND SHASHIKANT

|          |              |
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| ART UNIT | PAPER NUMBER |
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2621

|           |               |
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| MAIL DATE | DELIVERY MODE |
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05/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/722,474             | JOCH ET AL.         |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Andy S. Rao            | 2621                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/1/07</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

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## DETAILED ACTION

### *Specification*

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Novotny et al., (US 2005/0123282 A1 hereinafter referred to as "Novotny").

Novotny discloses a method of predicting motion vectors associated with a block of pixels of a picture to be included in a data stream for differential motion vector coding of a video signal (Novotny: paragraph [0104], claim 23), said method comprising the steps of: organizing a set of reference pictures in to a pair of lists and according to each reference picture within said lists at least one reference index (Novotny: paragraph [0066], lines 1-8); associating with selected ones of said blocks in said video signal at least one motion vector that references a respective one of said lists, with each vector associated with a selected one of the blocks referencing a different list (Novotny: paragraph [0037], lines 1-18), each of which vectors defines disposition of said block relative to a reference picture in the respective one of said lists, and computing a predicted value for each of said vectors from vectors of adjacent blocks referencing the same list as the vector being computed (Novotny: paragraph [0026], lines 1-13), whereby, the prediction of a motion vector that selects a reference picture using a certain list of pictures is not dependent upon the motion vectors whose reference pictures are selected using the other list of reference pictures (Novotny: paragraph [0076], lines 1-8), as in claim 1.

Regarding claim 2, Novotny discloses that the computation utilizes the values of spatially neighboring motion vectors that use the same list of reference pictures as the motion vector being predicted, regardless of the relative temporal direction of the reference pictures selected for the current and neighboring motion vectors (Novotny: paragraph [0075], lines 1-8), as in the claim.

Regarding claims 3-4, Novotny discloses wherein the motion-compensation-based video coder supports a plurality of block partition sizes for performing motion compensation (Novotny: paragraphs [0051]-[0064]), as in the claims.

Regarding claim 5, Novotny discloses wherein said motion vectors may be computed using one of a plurality of predefined computation strategies (Novotny: paragraph [0043], lines 1-13), as in the claim.

Regarding claim 6, Novotny discloses wherein a first of said strategies a motion vector from a single neighboring block that uses the same list as the motion vector being predicted (Novotny: paragraph [0066], lines 1-12), as in the claim.

Regarding claims 7-12, Novotny discloses wherein said first of said strategy is applied only when partitioned size of the block for which the motion vector is being predicted 16x8 or 8x16 luminance samples (Novotny: paragraphs [0051]-[0065]), as in the claims.

Regarding claims 13-20, Novotny discloses wherein a second computation strategy selects motion vectors from up to three neighboring blocks (Novotny: paragraph [0030], lines 1-17), as in the claims.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kondo discloses a motion vector calculating method. Kikuchi discloses a video encoding/decoding method.

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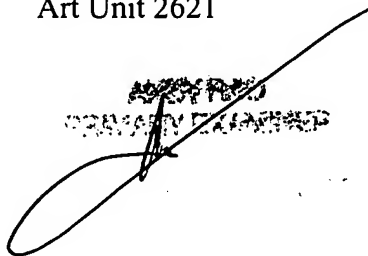
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao  
Primary Examiner  
Art Unit 2621

asr  
May 8, 2007

  
APPROVED  
PRIMARY EXAMINER